

WHAT IS CLAIMED IS:

1. A key information issuing device issuing key information to a key information retaining device, comprising:  
an authentication module authenticating an issuer of the key information;  
an output module outputting the key information to said key information retaining unit; and  
a recording module recording a mapping of the issued key information to said key information retaining unit,  
wherein the key information is issued in response to an indication of the authenticated issuer.

2. A key information issuing device according to claim 1, wherein said key information retaining device is a wireless operation device wirelessly connected to an information device and includes a key information input module inputting the key information in contact with said key information issuing device, and

said output module includes a contact module outputting the key information in contact with said key information input module.

3. A key information issuing device according to claim 1, wherein said key information retaining device is a wireless operation device wirelessly connected to an information device and includes a medium input module inputting information from a recording medium, and

said output module includes a recording medium write module writing the information to said recording medium, and issues the key information through said recording medium.

5           4. A key information issuing device according to claim 1, wherein said key information retaining device is a wireless operation device wirelessly connected to an information device and includes a near communication module incapable of performing communications beyond a predetermined distance, and

10           said output module includes a near communication module incapable of performing the communications with said key information retaining device beyond a predetermined distance, and issues the key information through said near communication module.

15           5. A key information issuing device according to claim 1, further comprising:

          a receiving module receiving wireless signals from said key information retaining device; and

20           a decoding module decoding the information contained in the wireless signals and encrypted with the key information.

          6. A wireless operation device wirelessly connected to an information device, comprising:

25           a key information input module inputting key information for encrypting the information;

          a recording module recording the key information;

201704151001

an operation module detecting an operation of a user;  
an encryption module encrypting user's operation based  
input information with the key information; and  
a transmission module transmitting the encrypted input  
5 information to the information device.

7. A wireless operation device according to claim 6,  
wherein said key information input module includes a contact  
module inputting the key information in a contact manner.

8. A wireless operation device according to claim 6,  
wherein said key information input module includes a medium input  
module inputting information from a recording medium.

9. A wireless operation device according to claim 6,  
wherein said key information input module includes a near  
communication module incapable of performing communications  
beyond a predetermined distance.

10. A wireless operation device according to claim 6,  
further comprising a setting module setting an execution or  
non-execution of the encryption,

wherein said encryption module encrypts the input  
information when the execution of the encryption is set.

11. A wireless operation device wirelessly connected to  
an information device, comprising:

an operation module detecting a user's operation;  
a transmission module transmitting user's operation based  
input information; and

a confirmation module confirming whether there is a  
5 response signal from the information device with respect to the  
transmitted input information,

wherein the transmission of the input information is  
stopped if the response signal is not obtained.

10 12. A wireless operation device wirelessly connected to  
an information device, comprising:

an operation module generating input information by  
detecting a user's operation;

15 a simulated information generation module generating  
simulated information simulating the input information; and

a transmission module transmitting the input information  
or the simulated information.

20 13. A wireless operation device according to claim 12,  
wherein the simulated information is transmitted irrespective  
of whether the user's operation is made or not.

25 14. A key information issuing device according to claim  
1, wherein said key information retaining device is an electronic  
key that unlocks a predetermined area.

15. A key information managing method of managing key

20140524001

information issued to a key information retaining device,  
comprising:

authenticating an issuer of the key information;  
generating key information;

5        outputting the key information to said key information  
retaining unit, and

recording a mapping of the issued key information to said  
key information retaining unit.

10        16. A key information managing method according to claim  
15, wherein said key information retaining device is a wireless  
operation device wirelessly connected to an information device  
and includes an input module inputting information in a contact  
manner, and

15        outputting the key information involves issuing the key  
information through said input module.

20        17. A key information managing method according to claim  
operation device wirelessly connected to an information device  
and includes a medium input module inputting information from  
a recording medium, and

25        outputting the key information involves writing the  
information to said recording medium to issue the key information  
through said recording medium.

18. A key information managing method according to claim

15, wherein said key information retaining device is a wireless operation device wirelessly connected to an information device and includes a near communication module incapable of performing communications beyond a predetermined distance, and

5        outputting the key information involves issuing the key information through said near communication module.

19. A key information managing method according to claim 15, further comprising:

10        receiving wireless signals from said key information retaining device; and

      decoding the information contained in the wireless signals and encrypted with the key information.

15        20. A device control method based on wireless signals, comprising:

      inputting key information for encrypting information;  
      recording the key information for the encryption;  
      detecting an operation of a user;

20        encrypting user's operation based input information with the key information; and

      transmitting the encrypted input information through on the wireless signals.

25        21. A device control method according to claim 20, wherein inputting the key information involves inputting the key information through on contact signals different from the

wireless signals.

22. A device control method according to claim 20, wherein  
inputting the key information involves inputting the key  
5 information from a recording medium.

23. A device control method according to claim 20, wherein  
inputting the key information involves inputting the key  
information in near communications impossible of communications  
10 beyond a predetermined distance.

24. A device control method according to claim 20, further  
comprising setting an execution or non-execution of the  
encryption,

15 wherein encrypting the input information involves  
encrypting the input information when the execution of the  
encryption is set.

25. A device control method based on wireless signals,  
20 comprising:

detecting a user's operation;

transmitting user's operation based input information;

and

confirming whether there is a response signal with respect  
25 to the transmitted input information,

wherein the transmission of the input information is  
stopped if the response signal is not obtained.

26. A device control method based on wireless signals,  
comprising:

5       generating input information by detecting a user's  
operation  
      generating simulated information simulating the input  
information;  
      transmitting the input information; and  
      transmitting the simulated information.

10       27. A device control method according to claim 26, wherein  
the simulated information is transmitted irrespective of whether  
the user's operation is made or not.

15       28. A key information managing method according to claim  
15, wherein said key information retaining device is an  
electronic key that unlocks a predetermined area.

20       29. A readable-by-computer recording medium recorded with  
a program executed by a computer to manage key information issued  
to a key information retaining device, comprising:

      authenticating an issuer of the key information;  
      generating key information;  
      outputting the key information to said key information  
25   retaining unit; and  
      recording a mapping of the issued key information to said  
key information retaining unit.



30. A readable-by-computer recording medium recorded with  
a program according to claim 29, wherein said key information  
retaining device is a wireless operation device wirelessly  
5 connected to an information device and includes an input module  
inputting information in a contact manner, and

outputting the key information involves issuing the key  
information through said input module.

31. A readable-by-computer recording medium recorded with  
a program according to claim 29, wherein said key information  
retaining device is a wireless operation device wirelessly  
connected to an information device and includes a medium input  
module inputting information from a recording medium, and

15 outputting the key information involves writing the  
information to said recording medium to issue the key information  
through said recording medium.

32. A readable-by-computer recording medium recorded with  
20 a program according to claim 29, wherein said key information  
retaining device is a wireless operation device wirelessly  
connected to an information device and includes a near  
communication module incapable of performing communications  
beyond a predetermined distance, and

25 outputting the key information involves issuing the key  
information through said near communication module.

33. A readable-by-computer recording medium recorded with a program according to claim 29, further comprising:

receiving wireless signals from said key information retaining device; and

5 decoding the information contained in the wireless signals and encrypted with the key information.

34. A readable-by-computer recording medium recorded with a program executed by a computer to implement device control using wireless signals, comprising:

inputting key information for encrypting information;

recording the key information for the encryption;

detecting an operation of a user;

10 encrypting user's operation based input information with the key information; and

15 transmitting the encrypted input information through on the wireless signals.

35. A readable-by-computer recording medium recorded with a program according to claim 34, wherein inputting the key information involves inputting the key information through on contact signals different from the wireless signals.

36. A readable-by-computer recording medium recorded with a program according to claim 34, wherein inputting the key information involves inputting the key information from a recording medium.

37. A readable-by-computer recording medium recorded with  
a program according to claim 34, wherein inputting the key  
information involves inputting the key information in near  
5 communications impossible of communications beyond a  
predetermined distance.

38. A readable-by-computer recording medium recorded with  
a program according to claim 34, further comprising setting an  
10 execution or non-execution of the encryption,  
wherein encrypting the input information involves  
encrypting the input information when the execution of the  
encryption is set.

39. A readable-by-computer recording medium recorded with  
15 a program executed by a computer to implement device control  
using wireless signals, comprising:

detecting a user's operation;

transmitting user's operation based input information;

20 and

confirming whether there is a response signal with respect  
to the transmitted input information,

wherein the transmission of the input information is  
stopped if the response signal is not obtained.

40. A readable-by-computer recording medium recorded with  
25 a program executed by a computer to implement device control

add